PROCUREMENT GUIDANCE



PRICE BENCHMARKING

Works, Goods and Non-consulting Services in World Bank-financed Projects



OCTOBER 2023

Published October 2023 - First Edition

Copyright © 2023 The World Bank

1818 H Street, NW, Washington DC 20433 Telephone: 202-473-1000 Internet: <u>www.worldbank.org</u>

Disclaimer

This work is a product of the staff of The World Bank. The findings, interpretations, and conclusions expressed in this work do not necessarily reflect the views of the World Bank, its Board of Executive Directors, or the governments they represent.

Rights and Permissions

The material in this work is subject to copyright. Because the World Bank encourages dissemination of its knowledge, this work may be reproduced, in whole or in part, for noncommercial purposes as long as full attribution to this work is given. Any queries on rights and licenses, including subsidiary rights, should be addressed to:

Office of the Publisher The World Bank 1818 H Street, NW Washington, DC 20433 USA Fax: 202-522-2422

Email: pubrights@worldbank.org

Common Abbreviations and Defined Terms

Abbreviation/Term	Full Terminology/Definition
Abnormally Low Bid	An Abnormally Low Bid/Proposal is one in which the Bid/Proposal price, in combination with other elements of the Bid/Proposal, appears so low that it raises material concerns with the Borrower as to the capability of the Bidder/Proposer to perform the contract for the offered price.
Bank	World Bank.
Bid	An offer, by a firm or joint venture, in response to a Request for Bids to provide the required Goods, Works, or Non-consulting Services.
Bidder	A firm or joint venture that submits a Bid for Goods, Works, or Non-consulting Services in response to a Request for Bids.
Borrower	A Borrower or recipient of Investment Project Financing (IPF) and any other entity involved in the implementation of a project financed by IPF.
Consultant	A variety of private entities, joint ventures, or individuals that provide services of an advisory or professional nature. Where the Consultant is an individual, they are not engaged as an employee.
Consulting Services	Covers a range of services that are of an advisory or professional nature and are provided by Consultants.
	These Services typically involve providing expert or strategic advice, e.g., management consultants, policy consultants, or communications consultants. Advisory and project related Consulting Services include, for example, feasibility studies, project management, engineering services, finance and accounting services, training, and development.
Environmental and Social Framework (ESF)	The Bank's Environmental and Social policy, primarily consisting of ten Environmental and Social Standards (ESSs), which set out the requirements that apply to Borrowers when delivering Bank-financed projects.
Goods	A category of Procurement that includes commodities, raw material, machinery, equipment, vehicles, plant, and related services such as transportation, insurance, installation, commissioning, training, and initial maintenance.
IPF	Investment Project Financing.
Non-consulting Services	Services that are not Consulting Services. Non-consulting Services are normally Bid and contracted on the basis of performance of measurable outputs, and for which performance standards can be clearly identified and consistently applied. Examples include drilling, aerial photography, satellite imagery, mapping, and similar operations.

Abbreviation/Term	Full Terminology/Definition
Price Benchmarking	The practice whereby market analysis, cost estimating tools, affordable cost targeting, and design/manufacturing analysis are used to establish a fair market price.
Procurement	The function of planning for and sourcing Goods, Works, Non-consulting Services, and/or Consulting Services to meet required objectives.
Procurement Process	The whole Procurement lifecycle that starts with the identification of a need and continues through planning, preparation of specifications/ requirements, budget considerations, selection, contract award, and contract management.
Project Procurement Strategy for Development (PPSD)	A project-level strategy document, prepared by the Borrower, that describes how Procurement in IPF operations will support the development objectives of the project and deliver VfM.
Proposal	An offer, in response to a Request for Proposals, that may or may not include price, by one party to provide Goods, Works, Non-consulting Services, or Consulting Services to another party.
Proposer	An individual entity or joint venture that submits a Proposal for Goods, Works, and Non-consulting Services in response to a Request for Proposals.
VfM	Value for Money.
Works	A category of Procurement that refers to construction, repair, rehabilitation, demolition, restoration, maintenance of civil work structures, and related services such as transportation, insurance, installation, commissioning, and training.

Contents

SECTION I. Introduction1
SECTION II. Price Benchmarking Components5
SECTION III. Benchmarking Methodology for Works, Goods, and Non-consulting Services
SECTION IV. Benchmarking Using Indices19
SECTION V. Conclusion23

Introduction

Purpose

This Guidance has been developed to support Borrower's with Price Benchmarking and how it may be applied throughout the Procurement Process for Works, Goods, and Non-consulting Services.

This Guidance provides relevant information on the application of Price Benchmarking when procuring Works, Goods, and Non-consulting Services and why it may be needed. It also sets out the process of Price Benchmarking during Procurements and provides the relevant knowledge and guidance on what is needed to complete a Price Benchmarking exercise.

This Guidance helps to inform Borrower's views that they are receiving a fair and competitive price, while also undertaking appropriate due diligence to ensure the Works, Goods, or Non-consulting Services procured are fit for purpose, with the aim of achieving Value for Money (VfM).

Background

Generally, Price Benchmarking can be defined as "the practice whereby market analysis, cost estimating tools, affordable cost targeting, and design/manufacturing analysis are used to establish the fair market price."¹ This definition may usefully be interpreted as using Price Benchmarking as a tool at the start of a Procurement or project to determine a "fair price" and to indicate the potential monetary expense that can help improve the cost estimate. However, Price Benchmarking doesn't just take place at the start of a Procurement exercise. It may also be a structured method used to evaluate both inflation and dynamic cost shifts that have occurred within the market since the Procurement commenced. Many factors can affect market pricing, some of these are listed below.

- a. Market demand
- b. Manufacturing capacity
- c. Introduction of new or advanced manufacturing technology
- d. Additional entrants to the market
- e. Natural events, e.g., earthquakes, hurricanes, and pandemics
- f. Market closures or export bans
- g. Introduction of new legislation or industry standards

SECTION

This indicates that Price Benchmarking should be used regularly throughout the Procurement Process, as well as during the contract management stage, which is especially important in the case of long-term projects with extended contract management. This may be more common in Works projects but should be taken into account when procuring Goods or Non-consulting Services that are undertaken over a long period of time.²

What Is Price Benchmarking and Why Is It Needed?

Price Benchmarking is the process of comparing, where possible, like for like Works, Goods, or Non-consulting Services to gain a better understanding of the overall pricing within a marketplace; completing extra checks to examine the Works, Goods, or Non-consulting Services being procured to ensure they are fit for purpose for the desired outcome; and assisting the project team and Borrower to deliver a Procurement that achieves VfM.

Price Benchmarking may be used as a tool to collate pricing information within a marketplace and analyze the information gathered to benchmark how much the demanded Works, Goods, or Non-consultant Services costs. This research, therefore, can be used to determine the price by which VfM can be achieved. This helps inform the Borrower procuring the Works, Goods, or Non-consulting Services to determine the price range in which they may be willing to pay and at which point the price would be too expensive. Price Benchmarking at the early stages of a Project allows Borrowers to use the Benchmarked figure to inform potential negotiations, if approved by the Bank once Proposals have been received.

Price Benchmarking may also be used as a tool to achieve other outcomes and help the Borrower learn more about a marketplace, such as to:

- a. Help determine project feasibility
 - In the early stages of a Project and when conducting a feasibility study, it is important to ensure the Works, Goods, or Non-consulting Services being procured are affordable/ financially feasible for the project in the long term. Price Benchmarking may help inform whether or not the initial upfront price of a Procurement, whether being a onetime purchase or a repeat purchase, as well as the lifecycle costs of the project are feasible for the Borrower. If the Borrower cannot financially support the product or service throughout the lifecycle of the Project, it will then unlikely be financially feasible.
- b. Determine whether new marketplace pricing offers appropriate VfM?
 - When procuring Works, Goods, or Non-consulting Services, it is important to determine whether or not it will be viable to procure from the market and, therefore, whether or not the Borrower can financially afford to procure the Works, Goods, or Non-consulting Services initially and then cover costs throughout the lifecycle. If not, the Price Benchmarking may give the Borrower an early indication that they may potentially have to source in a different manner. This may mean procuring different types or versions of a Work, Good, or Non-consulting Service. This is more relevant when looking at more complex Goods, such as health care products. If a Procurement is unlikely to achieve VfM, the Borrower may

have to procure a completely different Good or Non-consulting Service. In terms of Works projects, this may mean changing the design, materials used, or specifications. For more information on VfM please see The World Bank, *Procurement Guidance: Value for Money*.

- c. Support whether Works, Goods, or Non-consulting Services are fit for purpose
 - Through Price Benchmarking the Borrower may be able to develop a better understanding of whether or not the Works, Goods, or Non-consulting Services are fit for purpose. Abnormally Low Bids and Proposals also raise concern for the Works, Goods, or Non-consultant Services being procured. The Bank's Procurement Regulations provide the following definition of Abnormally Low Bids and Proposals³:

"An Abnormally Low Bid/Proposal is one in which the Bid/Proposal price, in combination with other elements of the Bid/Proposal, appears so low that it raises material concerns with the Borrower as to the capability of the Bidder/Proposer to perform the contract for the offered price."

For more information on Abnormally Low Bids, please see The World Bank, *Procurement Guidance: Abnormally Low Bids and Proposals*.

If a Work, Good, or Non-consultant Service has an Abnormally Low Bid or Proposal, it should raise concerns about the Bid and the Bidder's capability to deliver the Work, Good, or Non-consulting Service, and whether it will likely be fit for purpose to perform the contractual obligations for the offered price. On the other hand, if a price is abnormally high, it also raises material concerns with the Supplier as to whether or not the Work, Good, or Non-consultant Service is above the desired purpose and potentially unusable to the Borrower.

- Price Benchmarking helps extend the due diligence analysis of a Supplier. If a price is Abnormally Low, again it raises material concerns with the Supplier's reputation and may influence their capacity to fulfil the contractual obligations within the contract and to be able to conform to the Environmental and Social Framework.
- d. Emergencies
 - Price Benchmarking is also a tool that may be used in an emergency project where Works, Goods, or Non-consulting Services are demanded very quickly, potentially during a time of market failure. Price Benchmarking before and during the Procurements will help the Borrower to address the aforementioned points, providing information to help determine whether the Works, Goods, or Non-consultant Services being procured are fit for purpose and achieve VfM in the emergency scenario.

Types of Price Benchmarking

This *Guidance* explains two techniques of Price Benchmarking. The first is a generic Price Benchmarking technique that may be used for Goods, Works, or Non-consulting Services that have pricing available to the Borrower undertaking the Price Benchmarking exercise. See the section

Benchmarking Methodology for Goods, Works, and Non-consulting Services. The second form of Price Benchmarking is how to Benchmark through indices. Due to the nature of this Benchmarking and the need for indices, it should only be used for Goods and Works that have a market with an up-to-date relevant index. An example of a Good that can be benchmarked by indices is a global container freight, and an example of a component of a Works project that can be benchmarked using indices is steel. It is important to determine which Price Benchmarking technique should be used at the start of a Price Benchmarking exercise. In some cases, when necessary, particularly during Works projects, a combination of the two techniques may be used.



Price Benchmarking Components

When to Benchmark?

When considering Price Benchmarking for a project, the first step is to determine what the purpose of the Price Benchmarking exercise is, when you will benchmark, and how you will benchmark prices. This step can be completed by developing a short Price Benchmarking Plan (see the section Benchmarking Methodology for Works, Goods, and Non-consulting Services).

A Price Benchmarking exercise and the information collected may be used in all six of the key stages in Procurement as shown in Figure II-1.

FIGURE II-1 World bank key stages in procurement⁴. (Project procurement strategy for development, PPSD)



Initially, Price Benchmarking may be used to assist with project feasibility and to inform cost estimates. This may fit into the first three stages of the procurement process using Figure II-1. The sources available to derive this information is data available to the public and historic data, this is further stated in the section Benchmarking Methodology for Goods, Works and Non-consulting Services.

Once onto the fourth Procurement stage, Price Benchmarking may be updated usefully with more informative data from suppliers, comparing against the original data previously collected. If completing future Procurements of the same products, or if the project is longer, Benchmarking data may helpfully be used continuously and refined as needed, allowing the Borrower to analyze if and how the market may be changing and how factors such as inflation may be affecting the marketplace.

During the fifth stage, implementation, the cost of the Works, Goods, or Non-consultant Services should be regularly checked and recorded to determine whether the price matches up with the data collected in the first four Procurement stages. If there are any unforeseen costs that may be added during implementation, they should be recorded for future Procurements and to enhance future Price Benchmarking processes.

Once at the sixth stage of the Procurement process, a Price Benchmarking exercise may be completed again to further understand how the market has changed and better prepare the Borrower for the next Procurement Process.

Considerations When Benchmarking

Are Works, Goods, and Non-consultant Services Comparable?

When collecting data and prices for Works, Goods, and Non-consultant Services components, it is key to ensure that all of the products being assessed are of a comparable nature, i.e., apples with apples; ensuring the Price Benchmarking is as successful as possible. If, however, the Works, Goods, or Non-consulting Services being assessed aren't exactly the same, it is important to choose examples using best endeavors. To ensure this happens, the Borrower could first determine in their Price Benchmarking Plan, Define Benchmarking Objectives (see the section Benchmarking Methodology for Goods, Works, and Non-consulting Services), exactly what is going to be procured.

At the start of a Procurement, if the Borrower is not yet sure of the specific product needed, for example, the Borrower wants to procure vehicles for moving large amounts of material (stones or soil, etc.) but does not know the exact type of vehicle required, Price Benchmarking may be a useful tool as part of the market research to collect accurate market pricing to assist the Borrower in procuring the correct product.

Is Data Up to Date?

When researching prices related to Works, Goods, or Non-consulting Services information, it is important to ensure the data being collected is accurate and up to date. If up-to-date information is not available, it is important to be aware that, at the time of benchmarking, the pricing may be out

of date or information relating to the date may not be available and, therefore, may not accurately reflect the current marketplace.

If up-to-date data is not available, then best endeavors apply. It is important to try to collect as much recent and accurate data as possible so that the Borrower understands the pricing of the market in the past. This may give the Borrower a better understanding of how prices have changed, especially in times of an emergency, such as a pandemic. An example of products that may fluctuate regularly are agricultural commodities such as grain, which fluctuate in price and supply due to the weather and the price of fuel.

Are Specifications Clear?

A specification may be defined as a "detailed description of the product or service required."⁵ A specification is used to define a description of the Works, Goods, or Non-consulting Services expected to be supplied in compliance with the contractual terms. When Price Benchmarking Works, Goods, or Non-consulting Services, it is important to benchmark with comparable, if not ideally the same specifications; otherwise, benchmarks may not be reliable.

However, even if the Borrower is unable to gather information on Works, Goods, and Non-consulting Services that do not have the same specifications or comparable specifications, it is important to undertake Price Benchmarking where possible. On a best-endeavors basis using similar Works, Goods, or Non-consulting Services that may not have the same or similar specifications but are the closest option, this will give the Borrower an idea of the marketplace and the cost of other Works, Goods, or Non-consulting Services. One must state that the specifications are not comparable or the same and, where they are different, giving the Borrower as much information as possible.

Which Product/Services Standards/Certifications?

A certification is "a procedure by which a third party gives written assurance that a product, process, or service is in conformity with certain standards. Certification can be seen as a form of communication along the supply chain."⁶ When benchmarking, it should be defined as to whether or not the data being collected is for a Works, Goods, or Non-consulting Services with a particular certification to ensure the standard of the product. If seeking products or services with a particular standard is decided, data collected must state whether or not the Works, Goods, or Non-consulting Services have the particular certification stated or a similar equivalent. If not, one must be aware and note that having certification or not may affect the price. Products or services with an accreditation.

If collecting data from different countries, it is important to determine the relevant acceptable accreditations or certifications that are comparable in the different countries. There may be accreditations or certifications equivalent to those which the Borrower has decided to procure from separate governing bodies, for example, international standards. An international standard is a "document that has been developed through the consensus of experts from many countries and is approved and published by a globally recognized body."⁷ An example of a set of international standards are the International Organization for Standardization (ISO) standards, defined as "an independent, nongovernment international organization with a membership of 168 national standards bodies. Through its members, it brings together experts to share knowledge and develop voluntary, consensus-based, market relevant International Standards that support innovation and provide solutions to global challenges."⁸ An example of an ISO standard is the ISO 13485:2016 for medical devices. This standard has been developed to "manage quality throughout the life cycle of a medical device."⁹

Which Product Models?

A product model is variation within a specification; products can have a range of models that are likely to have different features from basic to advanced. While looking at specifications, accreditations, or certifications, it is also important to look at comparative models in the marketplace. While several suppliers may supply a similar product that fits the same specifications, there may be a difference in product/services models that need to be taken into account. A Borrower collecting Price Benchmarking information may need access to independent experts of certain industries that can ensure that the models that are being compared are of a similar and comparative nature to make the Price Benchmarking efficient.

Any Extras/Additional Features?

When Price Benchmarking, one must ensure it is clear what is included in the Works, Goods, or Nonconsulting Services that have been offered by bidders. The Borrower collecting data may have to gather information on similar Works, Goods, or Non-consultant Services with similar extras and additional features. When the Borrower is collecting price information, they should also gather the specifications of what is included; this will enhance the knowledge of the pricing information. Before the products have gone through the Price Benchmarking process, the Borrower ideally should establish what extras and additional features may be reflected into the final price of a product or if the initial bid was for a base product only. This may make a considerable difference to the final price offered and overall VfM.

When looking at Work's projects, the Borrower ideally establishes what is included in the cost. For example, during groundworks it is important to establish if the cost is for just the clearance of the site, if taking away the material not needed is included, and other stages of groundworks. To help establish what is included in each stage of the works project, a Bill of Quantities is usually used. A Bill of Quantities "provide[s] a coordinated list of items, together with their identifying descriptions and quantities, that comprise the works to enable contractors to prepare tenders efficiently and accurately."¹⁰

Usability of Works, Goods, and Non-consulting Services?

While collecting data for Price Benchmarking, the Borrower needs to be sure that the end user will have the likely required skills and knowledge to use the Works, Goods, or Non-consulting Services to ensure that the products procured are usable. Therefore, when completing the research and gathering data, the Borrower should know that the products are fit for purpose and that the end user that will be using and maintaining the Works, Goods, and Non-consulting Services have the necessary skills, knowledge, infrastructure, and ability to use and maintain them appropriately.

Is There a Size/Quantity/Volume Discount?

When collecting pricing for Works, Goods, or Non-consulting Services, the Borrower may take into consideration the pricing models for products. Certain products may have specific pricing structures that allow for volume discount. Volume discount is a price reduction for customers who purchase a high quantity of a product; therefore, the Borrower collecting the pricing data will have to ensure that the same or similar pricing structures have been used. If one Supplier is offering a decrease in price for larger numbers of products, the Price Benchmarking should check to see if this is the case with other suppliers from whom they are collecting data to ensure like-for-like comparisons.

SECTION

Benchmarking Methodology for Works, Goods, and Non-consulting Services

Introduction

When Price Benchmarking there are a number of stages to take into consideration that should be completed sequentially to ensure the exercise of completed efficiently and effectively. There are six main components to an effective Price Benchmarking methodology, and, depending on the type of procurement being undertaken, these six will determine when the process finishes.

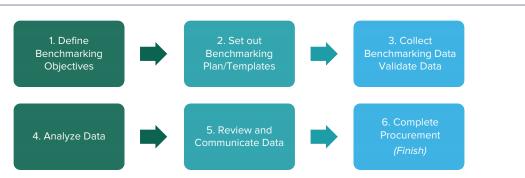
Benchmarking One-Off or More than One Procurement?

When procuring Works, Goods, or Non-consulting Services, the Borrower should determine whether or not there will be repeat Procurements, or whether it is a one-off Procurement. If the Procurement is a one-off, the Borrower may only Benchmark prices once, as seen in Figure III-1. However, if the Procurement is a recurring Procurement, the Borrower may wish to benchmark at the start and end of each Procurement Process, as in Figure III-2. This allows the Borrower to identify and review prices each time, enabling the tracking of market prices, and identification of price changes or changes in a dynamic marketplace.

Step 1. Define Benchmarking Objectives

The first step in Price Benchmarking is to determine the objectives of the Benchmarking process. These objectives should match the desired outcomes of the Project Procurement Strategy for Development (PPSD). For more information on the PPSD see The World Bank, <u>Project Procurement</u> <u>Strategy for Development (Short Form Guidance)</u>). A key outcome should be to identify which Works, Goods, or Non-consulting Services (that can be procured) gives the Borrower the best VfM while

FIGURE III-1 One-off procurement methodology



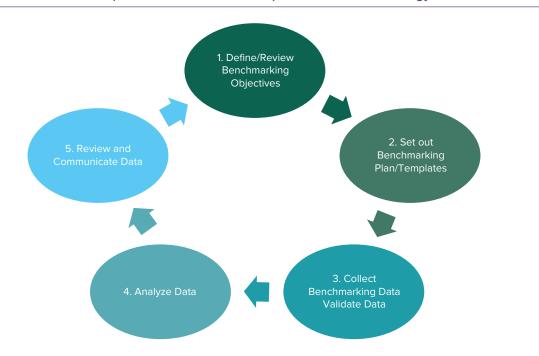


FIGURE III-2 Continued process for more than one procurement methodology

being best fit for purpose. Depending on what is being procured will determine the need and methodology for the Price Benchmarking.

While identifying the Works, Goods, or Non-consulting Services that will deliver optimal VfM, the Borrower may also consider other financial measures to review, for example,

a. Initial price

12

- The initial price is the cost of procuring the product. An example of this is purchasing and
 installing solar panels to be put on the roof of a building to generate electricity and heating
 for that building.
- b. Lifetime cost
 - A lifetime cost is the cost of maintaining the product that has been procured. Following the example of solar panels, a lifetime cost of the solar panels is the cost of cleaning and maintaining the solar panels to ensure they are running efficiently and able to generate electricity efficiently.
- c. Other costs (extras/unexpected/components)
 - Other costs are unexpected costs that may occur once the products have been procured. Following the solar panel example, an unexpected cost may be a solar panel breaking and no longer able to produce electricity, therefore, leaving the Borrower with less energy created and the cost of purchasing a new panel.

Step 2. Set Out Benchmarking Plan (Template)

Once the Benchmarking objectives have been defined, the Borrower can then develop the Price Benchmarking template (see Annex 1). The template acts as a document to record all the necessary information to Price Benchmark and then to complete analysis. It is important when completing the template to ensure the information collected from each supplier is the same or similar and any differences are considered and factored into the cost. See Considerations When Benchmarking in Section II.

When completing a template to benchmark prices, the Borrower may use a similar table to Table III-1. Such a table need not be complicated, but it should be used to simply display all of the relevant information clearly to then help the Borrower utilize and analyze the data. See Annex 1.

Step 3a. Collect Benchmarking Data

When collecting Price Benchmarking data, there are several sources the Borrower may use to collect reliable, useful information. As stated previously, the Borrower should ensure the following data:

- a. Information is up to date
- b. Products fit the specifications desired
- c. Information is certified to a specific standard
- d. Products are of a similar use
- e. Works, Goods, or Non-consulting Services have similar features or packages offered
- f. Sizes and numbers being priced are similar
- g. Any known caveats are detailed

When collecting data, sources vary within different industries and countries. The Borrower may informally reach out to the marketplace and suppliers of the products and services in a first instance to collect reliable prices. A list of potential data points follow:

- a. Public data sources on the internet
- b. Supplier product catalogs
- c. Public product catalogs
- d. Non-profit/multilateral organization/development bank catalogs
- e. Industry market reports
- f. Prices previously quoted in other procurement activities

Product	Supplier A Price	Supplier B Price	Supplier C Price	Supplier D Price	Supplier E Price	Average Price
Product A						
Product B						
Product C						
Caveats						
Comments						

TABLE III-1 Price benchmarking template

Once data has been collected, it is important to keep the source of the data noted with the date it had been received/collected. This allows the Borrower to keep track when prices were received and allows for new prices to be identified. If Benchmarking is going to be continued for future procurements, it is also useful to have prices and data from different times, so that the Borrower can use the data to analyze price changes, determine if or when costs are increasing, see if there is a seasonal change in prices, and estimate how much prices might change in the future.

Step 3b. Validate Data

While data is being collected, it is vital to ensure all considerations as stated in Considerations When Benchmarking have been taken into account. If a supplier and/or price do not fit the considerations, it should be highlighted on the data collected. If the Borrower identifies that the Works, Goods, or Non-consulting Services do not fit the considerations, then the Works, Goods, or Non-consulting Services should be taken out of consideration of the Benchmarking so they do not skew the data. However, if the Borrower determines that they will not have a significant effect on the data, then they can be conditionally considered when analyzing, with a note stating the rationale.

Step 4. Analyze Data

Once the data have been collected and validated, the Borrower should then start analyzing the data and determining what the Price Benchmark figure may be and from which supplier they can potentially best procure.

Using the example in Table III-1, the Borrower adds the prices collected and completes the analysis as shown in Table III-2. This allows the Borrower to work out the average price. The average price is determined by adding the prices up and dividing them by the number of prices there are.

 $\frac{\$450 + \$200 + \$250 + \$234 + \$100}{5} = \246.80

This approach starts the Benchmarking process. Depending on the prices collected, the Borrower may identify any anomalies in the data collected as in Table III-2. For example, Supplier E's price is substantially lower than the other suppliers; therefore, it may be considered an Abnormally Low Bid and will need to go through the Abnormally Low Bid process to clarify, verify, and justify whether or not it is abnormally low or a reasonable bid. See The World Bank, *Procurement Guidance: Abnormally Low Bids and Proposals*.

Product	Supplier A Price	Supplier B Price	Supplier C Price	Supplier D Price	Supplier E Price	Average Price
Product A	\$450	\$200	\$250	\$234	\$100	\$246.80
Product B	\$68	\$89	\$100	\$72	\$67	\$79.20
Product C	\$110	\$150	\$116	\$146	\$172	\$138.80
Caveats	N/A	N/A	Supplier C cannot supply for 8 months	N/A	N/A	N/A
Comments	N/A	Supplier B does not have the relevant specifications	N/A	N/A	N/A	N/A

TABLE III-2 Price benchmarking template completed

Once further research has been undertaken to understand whether or not Supplier E's bid is an Abnormally Low Bid, the Borrower completing the Benchmarking can make the decision to keep the supplier and pricing in the exercise or take it out. In this example, Supplier E's bid is abnormally low and has been taken out with a line through it as seen in Table III-3. This has altered the average price thus far and increased it to \$246.

 $\frac{\$300 + \$200 + \$250 + \$234}{4} = \$246$

Product	Supplier A Price	Supplier B Price	Supplier C Price	Supplier D Price	Supplier E Price	Average Price
Product A	\$300	\$200	\$250	\$234	\$100	\$246.00
Product B	\$68	\$89	\$100	\$72	\$67	\$79.20
Product C	\$110	\$150	\$116	\$146	\$172	\$138.80
Caveats	N/A	N/A	Supplier C cannot supply for 8 months	N/A	N/A	N/A
Comments	N/A	Supplier B does not have the relevant specifications	N/A	N/A	N/A	N/A

TABLE III-3 Price benchmarking template complete with abnormally low bid removed

It is important to also look out for abnormally high bids. If there are any prices that are abnormally high, the Borrower completing the exercise may complete extra research and due diligence on the product and supplier to ensure the correct product/service is being supplied at the right quantity/ specification, etc. See the section Considerations When Benchmarking.

Once the Borrower conducting the Benchmarking exercise has determined whether or not there are any anomalies, or Abnormally Low or high bids, they can finalize the Benchmarking range. The basic process to develop this range is to take the average price of the remaining prices. In the example of Table III-3, the Borrower has disqualified Suppliers A and E due to an abnormally high and low price, respectively.

The average price of the remaining Suppliers is \$246 for Product A. The Borrower may then use this as a current market benchmark:

- Supplier A Is over 10% more expensive than the Benchmark, may not be considered
- Supplier B Lower than the Benchmark, may be considered
- Supplier C Is within 10% of Benchmark, may be considered
- Supplier D Lower than the Benchmark, may be considered

In this example, the Benchmark Price being used is \$246, which is the average market price of all of the prices collected (without abnormally high or low prices). The example allows for prices just below the benchmark figure, which may not be considered abnormally low and for prices above the benchmark figure, but within say 10%, to be considered. Therefore, the Works, Goods, and Non-consulting Services that fall within these benchmarks may be determined as reasonable VfM.

5. Review and Communicate Data

Once the Benchmarking data has been collected and analyzed, it can then be shared with the wider project implementation unit (PIU)/team to provide knowledge of the market. The Benchmarking data may also help inform the following topics:

Determine Benchmarking Price Point

The Benchmarking price point may be used to highlight the current price point of a market, allowing the Borrower's procurement team to determine what the highest price or range that they are willing to pay may be.

Determine Potential Suppliers

The Benchmarking data will also allow the Borrower's procurement team to identify who the suppliers in the market are that can supply products or services that are fit for purpose and appear to be of VfM, while identifying which suppliers do not appear to fit the criteria.

The Benchmarking data will also give the Borrower's procurement team the knowledge, if agreed by the Bank, to go back to the suppliers with the Benchmarking figure and approximate range to negotiate the price. For more information on negotiations, see The World Bank, <u>Procurement Guidance:</u> <u>Negotiations and Best and Final Offer (BAFO)</u>.

Inform Cost Estimates

The Benchmarking data may also be helpfully used to inform cost estimates within a project. The Borrower's Procurement team may use this information to help estimate the budgets of a project in the early stages.

If the Procurement is a planned one-off Procurement of Works, Goods, or Non-consultant Services, and the Benchmarking information has been used for the desired outcome, the Borrower's Procurement team should then file the information for future reference to inform repeat Benchmarking Exercises.

If the Procurement of the Works, Goods, or Non-consulting Services is planned to take place on more than one occasion, the Borrower may use the existing data and templates to reevaluate the market. The information may be used to help define the Benchmarking objectives of the next procurement and may assist the Borrower's Procurement team to determine the potential market condition. If a Benchmarking exercise has been undertaken on a marketplace on more than one occasion, the Borrower may use the data from multiple Benchmarking activities to analyze how the market is moving in a more dynamic manner. Then in certain markets such as agricultural commodities, the Benchmarking may allow the Borrower to make a prediction on the best time to procure products as the market may change seasonally.

6. Complete Procurement (One-off Procurement Methodology Only)

During one-off Procurements, once the Price Benchmarking data has been reviewed and communicated, it may not then be needed and, therefore, the exercise can finish. It is important to keep the Price Benchmarking information and analysis that has been completed as they may be used in future Procurements.



Benchmarking Using Indices

Introduction

When Price Benchmarking certain Works, Goods, and Non-consulting Services, it is possible to use market indices to determine the position the market is currently in for that product and how that will affect the price. This type of Benchmarking is restricted to products that have markets that are traded. This mainly occurs in construction materials and are, therefore, often used more in Works projects. However, there are other markets that can be Benchmarked when looking at Goods, such as the freight market when considering logistics.

To Benchmark using indices, there are generally five stages.

- 1. Define the product being procured.
- 2. Find the indices chart for the relevant product.
- 3. Establish the current price point on the indices chart.
- 4. Analyze where in the market the current point is, where the point has been throughout a period of time, and where the point was when you procured the same products in the past.
- 5. Repeat if procuring products again and continue analyzing indices if procuring the same product in the future.

Define the Product Being Procured

The first step when Benchmarking through indices is to define the products you are benchmarking. As previously mentioned, to Benchmark using indices, the product requires a tracked market that produces an indices chart. Examples of the markets that are regularly tracked are

- Agricultural commodities
- Construction supplies
- Logistics

Find the Indices Chart for the Relevant Product

After determining the products that will be procured, the Borrower then looks for the correct indices chart that is up to date. There are numerous sources that will give up-to-date relevant information and charts.

Establish the Current Price Point on the Indices Chart

Once a relevant indices chart has been located, the Borrower should check to ensure they are examining the correct date and adjust the chart accordingly, so it displays the correct range. For example, in Figure IV-1, a one-year range for steel bar price has been selected in the red box. The range can be changed to a variety of time periods depending on the data that is required. The ranges in the figure are from one day to the total time the market has been recorded. This allows the Borrower to gain a more in-depth understanding of the market and how it has changed over time. This is further explained in the upcoming section Analyze Indices Chart.

The indices chart displays the current point of the market. In Figure IV-1, this number is in a yellow box stating 3782.0 CNY/T (Chinese yuan/ton).



FIGURE IV-1 Steel bar indices¹¹

Analyze Indices Chart

Once the current price point in the market has been established, the Borrower can then go on to identify the price points in which the market has been in the past, allowing the Borrower in data

gathering to understand if it is a good time to procure the product or if the price quoted fits with the current market price.

As shown in Figure IV-2, it is possible to highlight the market at different price points in time. June 15, 2022, has been highlighted to establish what the market point was at that time. In this example, it was 4659.6 Chinese yuan/ton (CNY/T). The Borrower can then determine the percentage decrease or increase.

 $\frac{\text{Starting value} - \text{Final value}}{\text{Starting value}} \times 100 = \frac{4659.60 - 3782.00}{4659.60} \times 100 = 18.83\% \text{ decrease}$

Determining the percentage increase and decrease may allow the Borrower to develop a better understanding of the market at different points in time. Depending on the reason found during the research, the Borrower can then examine why the market point may have changed, such as the COVID-19 pandemic, weather conditions etc. This may help the Borrower make more informed judgments on what the market point may do in the future.

The Borrower may also check Benchmark prices at different points in time. For example, if the Borrower had purchased steel on June 15, 2022, for a certain price and later the indices were at 4659.00 (CNY/T) on the 15 June, 2023, when the new prices were established, the Borrower can determine the percentage change. In this example, there has been a decrease of 18.83%. The Borrower can then determine the 18.83% decrease in the price that they received on June 15, 2022, to get an approximate price that can then be Benchmarked.



FIGURE IV-2 Steel bar indices (06/18/2023)¹²

Further Analysis

If the Borrower is planning on procuring more of the same product in the future, they can monitor the indices charts and determine if the prices are generally increasing or decreasing. This will inform the Borrowers plans for the future, particularly if there are certain times of the year that are better to procure an item because they will be less expensive.

Although it is important to take into account the reasoning behind the peaks and troughs of the market points, these can vary for many reasons, such as extreme events. Extreme events can distort long-term averages and, therefore, may be discounted. Peaks and troughs may also appear at different times of year for different products.



Conclusion

Price Benchmarking is an important tool for Borrowers to consider when procuring Works, Goods, and Non-consulting Services, providing valuable knowledge on markets, which in turn supports better analysis and informs key Procurement decisions.

It is key for Borrowers to achieve VfM. Price Benchmarking early on in the Procurement Process helps Borrowers understand the fair price that should be expected. When Benchmarking is applied, the Procurement team should have an enhanced understanding of what to expect financially throughout the project, helping to inform Procurement decisions from the start of a project.

Globalization has changed marketplaces, allowing more suppliers from all over the world to bid for contracts and work on World Bank–financed projects. Price Benchmarking helps develop confidence for Borrowers about what is being procured, what is reasonable, and the suppliers in the market.

Borrowers must consider that Price Benchmarking is not only a tool that can be used at the start of a Procurement but also that it informs and enhances understanding of marketplaces throughout a project lifecycle, while also providing information and knowledge that can be shared between projects and used by Borrowers to inform future Procurements.

ANNEX

Price Benchmarking Template

The following template may be used to collate Price Benchmarking information from suppliers, aiding Borrowers in completing the Price Benchmarking exercise described in this Guidance.

Product Name	
Product Model	
Model Year	
Supplier's Name	
Date Pricing Received	
Date Entered into Template	
Date Price is Valid Until	
Date Pricing Will Be Updated	
Specification of Product	
Additional Features	
Certification	
Price	
Volume Discount (If Applicable)	
Future Costs (If Applicable)	
Servicing (If Applicable)	
Training (If Applicable)	
Source of Information	
Link to Source	

The following template, from the section Benchmarking Methodology for Works, Goods, and Non-Consulting Services, can be used to take the data gathered from suppliers (in the template above) to determine the average price of a Work, Good, or Non-consultant Service within a project, allowing the Borrower to develop a Price Benchmarking figure.

Product – (state product to Price Benchmark)

	<i>(State Supplier)</i> Price	Average Price				
Product A						
Product B						
Product C						
Comment						
Caveat						

FIGURE A-1 Price benchmarking template

 $\frac{(\text{Supplier 1 price}) + (\text{Supplier 2 price}) + (\text{Supplier 3 price})}{\text{Number of suppliers}} = \frac{\text{Average price}}{\text{Average price}}$

Average price from Benchmark:

Endnotes

- ¹ Jeffrey P. Wincel, <u>Lean Supply Chain Management: A Handbook For Strategic Procurement</u>.
- ² Jeffrey P. Wincel, *Lean Supply Chain Management: A Handbook For Strategic Procurement*.
- ³ The World Bank, Procurement Guidance: <u>Abnormally Low Bids and Proposals</u>.
- ⁴ Source: The World Bank, <u>Key Stages in Procurement</u>.
- ⁵ Chartered Institute of Procurement & Supply, *Glossary of Procurement and Supply Chain Terms*.
- ⁶ Food and Agriculture Organization, *The Concepts of Standards, Certification and Labelling*.
- ⁷ International Electrotechnical Commission (IEC), International Standard (IS).
- ⁸ International Organization for Standardization (ISO).
- ⁹ ISO, <u>ISO 13485, Medical Devices</u>.
- ¹⁰ Royal Institution of Chartered Surveyors (RICS), NRM 2: New Rules of Measurement.
- ¹¹ Source: <u>Trading Economics, Steel Bar</u> (https://tradingeconomics.com/commodity/steel).
- ¹² Source: <u>Trading Economics, Steel Bar</u> (https://tradingeconomics.com/commodity/steel).



For additional information, such as Standard Procurement Documents (SPDs), Guidance, briefing, training and e-learning materials see www.worldbank.org/procurement

